

Amendment to the Specification:

Paragraph [0056] has been amended as follows:

--The monoclonal antibodies secreted by the subclones may be isolated or purified from the culture medium or ascites fluid by conventional immunoglobulin purification procedures such as, for example, ~~protein A-Sepharose~~ protein A-SEPHAROSE® (protein A fused to beaded cross-linked agarose), hydroxylapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.--

Paragraph [0088] has been amended as follows:

--*Purification of IL-23 - Murine IL-23* - IL-23 component was produced by co-expression of carboxyl-terminal His-tagged p19 and ~~FLAG0tagged~~ FLAG®-tagged (tagged by the small "TAG" octapeptide) p40 in human embryonic kidney cells (293 cells), and secreted protein was purified by nickel affinity resin. Endotoxin levels were undetectable at less than 0.2 endotoxin units per µg--.

Paragraph [0091] has been amended as follows:

--Murine IL-23 component was produced by co-expression of carboxyl terminal His-tagged p19 and ~~Flag-tagged p40~~ FLAG®-tagged p40 (p40 labeled by the small "TAG" octapeptide) in human embryonic kidney cells (293 cells) and secreted protein was purified by nickel affinity resin. Endotoxin levels were undetectable at less than 0.2 EU per µg. Spleen cell cultures were incubated in presence of IL-2 (100U/ml) and ConA (2.5 µg/ml) under Th1-inducing conditions (IL-12+ anti-IL-4), Th2-inducing conditions (IL-4+anti-IFN-γ), or purified IL-23 (100ng/ml) for 3-4 days, following which, the cultures were washed and re-stimulated with ConA for another 24 hours. Levels of various cytokines were measured using ELISA. The levels less than the lowest dilution of the standard curve range of ELISA kit were recorded as 'not detectable (N.D.)'. The results below are representative of three experiments performed independently.--

Paragraph [0104] has been amended as follows:

--*Generation of IL23p19 deficient mice.* Genomic DNA encompassing the murine IL23p19 locus was isolated from clone 198a3 of a genomic BAC library by Genome Systems

(Incyte Genomics, Palo Alto, CA). A targeting vector designed to replace the entire IL23p19 coding region with an EGFP reporter gene was constructed from the following DNA fragments using standard molecular cloning techniques: a thymidine kinase selection cassette; a 5' homology arm of 5403 base pairs defined by endogenous SacII and BglII sites on the distal and proximal ends, respectively; an EGFP expression cassette excised from pEGFP-1 (BD Clontech, Palo Alto, CA) using BamHI (5'-end) and AflIII (3'-end); a PGK-neo resistance cassette; and a 1203 bp short arm defined by an endogenous XhoI site at the proximal end and the primer 5'-GCTTGGTGGCCCCACCTATGAT-3' (SEQ ID NO: 1) at the distal end (Figure 6A). This construct was electroporated into 129/SvEv embryonic stem (ES) cells (Huang *et al.*, *Science* 259:1742 (1993)) and homologous recombination occurred in 9 out of 600 clones following selection with G418 and Gancyclovir. To verify correct targeting of the locus, genomic DNA from ES cells and animals was analyzed by southern blot. Digestion with BamHI followed by hybridization of membranes with probe 1 (a 831 bp genomic DNA fragment obtained by PCR with oligos 5'-AGACCCTCAAAGTTCATGAC-3' (sense) (SEQ ID NO: 2) and 5'-CTGACGGCGCTTTCTCTACC-3' (antisense) (SEQ ID NO: 3)) yielded a 7027 bp fragment for the wild-type allele and an 11788 bp fragment for the correctly targeted mutant allele. Similarly, digestion of genomic DNA with EcoRI followed by hybridization of membranes with probe 2 (a 390 bp genomic DNA fragment obtained by PCR with oligos 5'-TTTTGCCAGTGGGATACACC-3' (sense) (SEQ ID NO: 4) and 5'-AACTGCTGGGGCTGTTACAC-3' (antisense) (SEQ ID NO: 5)) yielded a 9197 bp fragment for the wild-type allele and an 6211 bp fragment for the correctly targeted mutant allele. Two ES cell clones (1c5 and 3h6) were injected into blastocysts, and chimeric animals that transmitted the mutant allele in their germline were obtained. For routine genotyping, we used a PCR-based method with a common antisense primer (5'-GCCTGGGCTCACTTTTCTG-3') (SEQ ID NO: 6), and wild-type specific (5'-GCGTGAAGGGCAAGGACACC-3') (SEQ ID NO: 7) and knockout-specific (5'-AGGGGGAGGATTGGGAAGAC-3') (SEQ ID NO: 8)) sense primers. This primer-triplet amplifies a 210 bp fragment for the wild-type allele and a 289 bp fragment for the mutant allele. PCR was carried out in a ~~Rebocycler~~ ROBOCYCLER® (thermocycler, Stratagene, La Jolla, CA), using the following conditions: 1 cycle of 94°C, 60"; 35 cycles of 94°C, 30", 58°C, 30", 72°C, 60"; 1 cycle of 72°C, 7".--

Paragraph [0105] has been amended as follows:

--*FACS analysis of blood cell subsets*: Spleens, thymi, and lymph nodes were isolated from 6-8 week old mice, and single cell suspensions were prepared by standard methods. Peripheral blood was obtained by cardiac puncture and treated with EDTA to prevent coagulation, and erythrocytes were lysed using ACK lysing buffer (Biosource, Camarillo, CA). All cells were incubated for 30 minutes on ice in Hanks balanced salt solution (HBSS) supplemented with 2% heat inactivated bovine calf serum. Cells were then stained in the same buffer with 1 μ g per million cells of various antibodies coupled to phycoerythrin, biotin or ~~Cychrome~~TM CYCHROMETM (BD Biosciences, NJ, USA). Where biotinylated antibodies were used, streptavidin-coupled PE-TR conjugate (Caltag, Burlingame, CA) was used for detection. After two washes with the same buffer, fluorescence was detected using an ~~Epics-XL~~ EPICS[®]-XL flow cytometry system (Beckman Coulter Inc., Fullerton, CA)--

Paragraph [0106] has been amended as follows:

--*Stimulation of allotypic T-cells*: CD4 and CD62L double positive T-cells were isolated from the spleens of 6-8 week old balb/c mice by a two-step isolation protocol. First, T-cells were depleted of other cell types by a negative magnetic selection (Miltenyi, Auburn, CA). These cells were then labeled with antibodies against CD4 and CD62L and sorted by FACS on a ~~MoFlo~~ MoFloTM high performance cell sorter (DakoCytomation, Fort Collins, CO). Dendritic cells from wild type or IL-23p19^{-/-} mice, both in the C57BL/6 background, were also isolated by a two-step protocol. CD11c positive splenocytes were positive selected by magnetic separation (Miltenyi, Auburn, CA) prior to labeling with antibodies against CD11c, MHC class II, and CD8. CD11c⁺ / MHC-II⁺ / CD8⁻ cells were then sorted by FACS, again using a MoFlo sorter. All populations used in the experiment were at least 98% pure. To elicit allostimulatory responses, 10⁴ dendritic cells and 10⁵ T-cells were incubated in a total of 200 μ l of IMDM supplemented with penicillin-streptomycin and 10% heat inactivated bovine calf serum (Hyclone, Logan, UT) in duplicates. In some cases, 100 ng/ml bacterial lipopeptides was added to stimulate cytokine production by dendritic cells. After 5 days of incubation, 120 μ l of supernatant were removed for cytokine measurement by ELISA, and replaced with fresh medium containing 1 γ Ci ³H-thymidine per well. Thymidine incorporation was determined 16 hours later

using a Top Count liquid scintillation counter according to the manufacturers instructions
(Packard Instruments, Meriden, CT).--